

VI. *On some new or little known British Hymenoptera.*
By P. CAMERON.

[Read March 5th, 1879.]

TENTHREDINIDÆ.

HYLOTOMA STEPHENSI, Leach.

I HAVE lately (thanks to Mr. J. E. Fletcher, of Worcester) had an opportunity of examining some specimens of both sexes of the *Hylotoma Stephensi*, Leach, a form which appears to be very little known.

Stephens (Ill. vii. 19, 14) describes it thus:—Head and thorax glossy violet-black; abdomen yellow; legs black, with whitish pile, and the four hinder femora pale yellow; wings hyaline fuscous, anterior with the costa to the stigma, including this last, dusky. Male with the antennæ rather long; female with the pleuræ yellow.

I may supplement this description by adding that the pleuræ in the ♂ are also sometimes yellow, and that the sutures of the mesonotum and the posterior tibiæ and tarsi are occasionally, for the greater part, of the same colour; while, on the other hand, there may be scarcely a trace of this colour on the pleuræ in the darker-coloured specimens. The labrum and the two front legs may be tinged with yellow, and the antennæ may be fuscous or light brown.

Mr. F. Smith, in his "Nomenclature of British Hymenoptera," sinks *Stephensi* as a variety of *pagana*, Pz., which differs from it in having the thorax and legs uniformly bluish-black, and the wings (comparing the specimens in my collection with *Stephensi*) are much darker, and the labrum is black. Mr. Smith may be correct in this, yet, if *Stephensi* may not be a good species, it still must be regarded as a distinct variety; a variety, too, confined exclusively to Britain, for no continental author has described *pagana* as varying in coloration.*

* Eversman (Bull. Mosc. xx. 11) describes a ♂ of *pagana* having all the tibiæ and tarsi luteous; Zaddach suggests that this is very possibly a form of *H. fuscipennis*, H.-S. or, if not, a distinct species.

Brischke and Zaddach,* in their monograph of the European *Hylotomæ*, appear to regard it as a good species, but one of which they had seen no examples.

Against the view that *Stephensi* may be a distinct species from *Pagana* must be stated the fact that the yellow on the thorax and legs is not constant in position or quantity; so that in the absence of a greater number of specimens to judge from, and of any information about its habits, its specific distinctness must be considered doubtful. But if not a species, I should certainly consider it as a variety or race rather than an aberration.

Pagana is one of the most widely distributed of sawflies. It is found all over the Palearctic, also in the Oriental region, while in the Nearctic it occurs as far south as Georgia.

Mr. Smith (Trans. Ent. Soc. 1874, p. 375) describes a species (*H. similis* sibi) from Japan, which, according to him, differs only from *Pagana* in having a yellow spot beneath the wings. If *Similis* is to be considered a good species, then *Stephensi* may well be regarded the same, if it be not identical with *Similis*.

The luteous British species of *Hylotoma* may be distinguished as follows:—

A. Legs and thorax entirely bluish-black *Pagana*, Pz.

B. Legs more or less luteous.

a. Pleuræ marked with yellow.

Legs for the greater part bluish-black; hinder tarsi not annulated with black *Stephensi*, Leach.

Legs for the greater part yellow; hinder tarsi annulated with black *Rosæ*, L.

b. Pleuræ without yellow.

Femora only black at the apex; anterior

wings with a fascia below the stigma.. *Cyaneo-crocea*, Forst.

Femora quite black, wings without a fascia *Melanochra*, Gmel.

NEMATUS NIGRO-LINEATUS, Cam.

Two or three years ago I collected a lot of the leaf-rolling larvæ of *Nematus crassulus*, Dbm., and placed them in a bottle by themselves. In the following spring the imagoes of *Crassulus* duly appeared, and along with them another and very different species, whose appearance in the bottle I could not account for, as I had been very

* Schr. Ges. König. 1862, 108.

careful to put in only the *Crassulus* larvæ. The strange insect had such a great resemblance to the common gall-maker (*Nematus pedunculi*, or whatever its name may be*), which forms the hairy pea-shaped galls on *Salix aurita*, that I thought it was a stray specimen which had got in with the other larvæ by mistake, but still I could not identify it as the gall-making species to my satisfaction, and so I left the matter to be cleared up by renewed investigation.

The enigma has now been cleared up by that acute investigator of the habit of insects, Mr. J. E. Fletcher, who succeeded last year in rearing four specimens out of larvæ living in the rolled-down leaves of *Salix viminalis*, so that I must have mixed up the larvæ of *Nigro-lineatus* with those of the commoner species.

Apart from the above-mentioned specimen, I have been acquainted with *Nigro-lineatus* since June, 1876, when I captured it among osiers on the banks of the Severn above Gloucester. I never could identify them with any of the descriptions. I sent a specimen over to Professor Zaddach, who returned it as being unknown to him. Still I did not venture to describe it, but inserted it in my "Catalogue of British Tenthredinidæ," under the name of *Nigro-lineatus*. Now, however, that its habits are known, it may be described without any hesitation.

Leaving the total diversity of habits aside, the gall-making *N. pedunculi* (the species having the greatest resemblance with it), may be known from *Nigro-lineatus* by the absence of any white on the pronotum apart from the tegulæ, by the somewhat longer and thicker antennæ, those of the ♂ being especially thicker, the 3rd joint, too, being nearly as long as the 4th; the mesonotum is more shining and not so punctured, while the 3rd submarginal cellule is longer, and the 2nd recurrent nerve interstitiate or nearly so.

Then it differs widely from all the leaf-rolling species known. *N. leucostictus*, Htg., and *N. crassulus*, Dbm., having the stigma and legs almost unicolorous, besides differing widely in form, while *N. xanthogaster*, Foers., as the name denotes, has the body marked with yellow, while the stigma is yellow and the scutellum punctured.

Neither Mr. Fletcher nor myself knows anything about the larva beyond its leaf-rolling habits, but I hope to be

* See Fauna of Scotland, Hymen. i. p. 43.

able to discriminate it this summer. The following is a description of the imago.

Black, almost shining. Antennæ about a fourth shorter than the body, black, filiform, the 3rd and 4th joints about equal, the rest becoming gradually shorter, and more distinctly separated and truncated at the apex. Head black, labrum and clypeus white, pilose, clypeus incised, mandibles piceous at the tips; palpi fuscous; vertex finely punctured, and covered with depressed pile. Mesonotum semi-opaque, finely punctured (more distinctly than on the vertex), scutellum shining, almost impunctate; cenchri obscure; pleuræ smooth, shining; the edge of the pronotum and the tegulæ white. Abdomen a little longer than the head and thorax, the apex bluntly pointed; cerci very long, pointing outwardly; sheath of saw projecting a little beyond the end of the cerci, pilose. Legs white; the extreme base of coxæ, the femora except at the base and apex, the apex of the posterior tibiæ and the tarsi black; the extreme apex of the anterior tibiæ and the apex of the tarsi fuscous; calcaria short, wings hyaline, costa fuscous, stigma large, fuscous at base, white at the apex; the 3rd submarginal cellule is longer than broad; the 2nd recurrent nervure is received a good bit in front of the 2nd submarginal.

The ♂ is similar in coloration, the antennæ are a little longer, but not much thicker; the underside fuscous, and the 3rd joint shorter than the 4th, the stigma fuscous.

Length 2—2½ lines; alar. exp. 4½—5 lines.

CYNIPIDÆ.

ONYCHIA.

This genus was first mentioned by Westwood, in Loud. Mag. 1833, p. 494, then by Walker, in Ent. Mag. ii. 517, the *Evania ediogaster*, Rossi, being given by the latter as the type, but his description does not agree with that insect, nor has it ever been found in this country so far as I can learn. The next mention of the genus is by Westwood, in the Appendix to his Introduction, vol. ii. p. 56, where it is characterized as follows:—

“Abdomen with the third segment very large, concealing the posterior ones, petiole very short, scutellum channelled throughout; antennæ filiform, 14-jointed in ♂, 13 in ♀; cubital areolets three; subcostal nerve not continued beyond the rib.”

An undescribed species indicated (*l. c.*), under the name of *biusta*, is given as the type, no mention being made of *ediogaster*.

By Dahlbom (*Onychia* och *Callaspidia*, 1842, p. 5), *Onychia* was used generically for the reception of *Evania ediogaster* and two other species, while another genus, *Callaspidia*, was created for the reception of the *Figites notata*, Fonsc. Giraud (*Verh. z. b. ges. Wien*, 1860, p. 156) followed Dahlbom in his definition of the genera, while he formed also another genus, *Omalaspis*, for his *O. noricus*. Reinhard (*B. E. Z.* 1860, p. 238) reversed this, using *Onychia* for *notata*, &c., while the name of *Aspicera*, Dbm., was used for *ediogaster*, Giraud (*l. c.*) himself having suggested either this, or the sinking of *Aspicera*, and the using of his own name *Bellona*, in preference. All this confusion was caused by *ediogaster* having been given as the type in the earlier indications of the genus; nor is it certain that the manner in which the names are used by Reinhard (and he is followed by Thomson and Foerster) can be considered correct. For it is clear that the description given by Westwood cannot apply to the species of *Onychia* as restricted by these authors. According to the Rev. T. A. Marshall (*Ent. Ann.* 1874, p. 120), *Onychia biusta* is an *Omalaspis*, a fact rendered clear from the description, as well as from an examination of the insect. *Onychia* then should be retained for *noricus*, Gir., *niger*, Htg. and *biusta*, W., while the *Onychia*, Reinh., Thoms., would require to be renamed.

However, I do not see that much good would be done by now acting in this way, the more especially as *Onychia* has been employed for so many years in its present meaning. Obviously, too, when a monographer splits up a genus into several, he has the right to use his own discretion as to for what species he will retain the original name, and what for the new genera. Moreover, we have seen that in the first indication of the genus a type was given with which the generic description did not agree, while the last type was not and still remains undescribed.

The three genera may be briefly characterized as follows:—

- | | |
|--|--------------------|
| A. Scutellum ending in a sharp spine | <i>Aspicera</i> . |
| B. Scutellum truncated. | |
| Abdominal petiole short | <i>Omalaspis</i> . |
| Abdominal petiole long | <i>Onychia</i> . |

Omਾਲaspis, as we have seen, is British, being represented by *biusta*. I have examined the specimen mentioned by Mr. Marshall (*l. c.*), but it unfortunately is not in good condition. It is black; the six basal joints of the antennæ and the legs are bright red; the basal three-fourths of the abdomen at the sides, and the basal half at the sides and above, dull red. The tegulæ appear to be dull red. The thorax is opaque, the mesonotum is faintly punctured. Length a little over 1 line.

Om. niger, Htg., differs from it in having the whole of the antennæ red, and the coxæ and base of femora black, while there is no red on the abdomen. *Om. noricus*, Gir., has the first joint of the antennæ black and the rest red; the abdomen is entirely black, as are also the tegulæ; the antennæ are stated to be as long as the head and thorax, while in *biusta* they are longer, being as long as the head, thorax and half of abdomen.

Biusta appears to be covered with a faint pale pubescence on the thorax, it being especially long on the metathorax.

I am glad to be able to record *Onychia*, Reinh. (*Calaspidia*, Dbm., Gir.), as British, and what adds to the interest of the discovery is that our species appears to be undescribed. I would propose to call it—

Onychia nigripes, sp. n.

Antennæ as long as the body, filiform, the apical joints a very little thicker than the basal; the 1st joint is nearly double the length of the 2nd; the 3rd is the longest, being a little longer than the 4th, which is itself somewhat longer than the 5th; the rest become shorter and thicker to the last, and also more globular and more truncated at the apex; the 13th joint is longer than the preceding two, being nearly as long as the 3rd; the colour is black for the greater part, the basal half of the joints of the flagellum being pale testaceous, this colour being especially noticeable on the apical joints. Head black, roughly punctured. Thorax black, opaque, roughly punctured; the prothorax is marked with longitudinal striations. The mesonotum is deeply fringed with long white hairs. Abdomen black, smooth, shining; the little ring on the petiole is piceous. Legs black; the anterior knees, base of all the tibiæ and tarsi testaceous. Wings hyaline, tinged with testaceous near the nervures.

The furrows of the mesonotum agree with Dahlbom's figure of *O. fonscolombi*, while it has also the peculiar hyaline membrane in front of the scutellum and the furrowed hind tibiæ characteristic of the genus.

Length 2 lines; alar. exp. $3\frac{3}{4}$ lines.

All the European species of this genus have the scutellum and more or less of the thorax, with the legs, reddish. It is true that the amount of the red coloration on these parts varies, but so far as I can make out from the descriptions, the thorax and the legs are never black together, nor is the red ever entirely absent, although it may vary from sanguineous to brown.

If Dahlbom's figure (pl. 1, f. 8) of *Onychia fonscolombi* be correct, then there is a considerable difference in shape between it and our insect. In *fonscolombi* the metathorax is longer and not so high, whereas in *nigripes* it is straighter. The last joint of the antennæ in *fonscolombi* is represented as being not much longer than the preceding, but this of course may be a mistake on the part of the artist.

Onychia rugosus, Htg. (considered by Reinhard to be a variety of *O. Westwoodi*, Dbm.), has the thorax all black, but then the legs are red.

The only specimen of *nigripes* I have seen was taken by Mr. J. B. Bridgman at Norwich. It is a female.

ALLOTRIA.

Allotria pleuralis, sp. n.

Antennæ a little shorter than the body, the apical half somewhat thicker than the basal; the first four or five joints pale yellow, the others black or rather dark fuscous. Head pale red, the vertex very slightly darker. Thorax: pronotum, mesonotum and the base of metanotum black; the pleuræ, sternum and apex of metanotum dark red. Abdomen black, reddish at the base above, and the basal half of the sides is more or less dark fuscous red. Legs pale yellow. Wings clear hyaline, nervures very pale testaceous; radial cellule small, scarcely longer than broad.

Length a little over $\frac{1}{2}$ a line; alar. exp. $1\frac{1}{2}$ lines.

This little species comes near to *A. longipennis*, Htg., but that has the whole of the antennæ and only the pro-

and meso-thorax reddish. *A. posticus*, Htg., differs from it in having only the metathorax red. *A. castaneus* is distinguished from it by having the body almost entirely castaneous; it is a larger species; the antennæ are longer, and the radial cellule is larger and longer.

My five specimens (three from the Clyde, near Newton, and two from Possil Marsh, all taken in July) show slight variations in the amount of red on the thorax and abdomen.

Allotria Tscheki, Giraud.

Vehr. z. b. Ges. Wien. 1860, 128, 4.

I have several specimens of what I consider to be this species, taken in Clydesdale—in Mugdock Wood and at Loch Libo—on the banks of the Ken, above Dalry—and one near Gloucester. It was bred by Tschek, from an *Aphis*, living on *Ribes rubrum*. It agrees so very closely with *Allotria victrix*, Westw., that at first I placed my specimens along with that species; and Giraud himself says that *Tscheki* might be taken for a variety of *victrix*, but that it differs from it in being smaller, in having the vertex always black, and in having the radial cellule shorter.

PHÆNOGLYPHIS.

Foerster. Verh. z. b. Ges. Wien. 1869, p. 338.

This genus is distinguished from the other genera of *Allotrina* by having the mesonotum distinctly furrowed, and one or two depressions at the base of the scutellum. *Hemicrisis*, Foer. (*l. c.*), agrees with it in the former peculiarity, but differs from it in having no depressions at the base of the scutellum.

The type of the genus is *Phæn. xanthochroa*, Foer. (*l. c.*, p. 339), which was taken near Lüttich.

C. G. Thomson has recently (Opusc. Ent. 1877, p. 811) characterized the same genus (or subgenus, as he calls it) under the name of *Auloxysta*, and describes seven species from Sweden—one of them (*A. rufa*) being to all appearances identical with Foerster's *Xanthochroa*.

In the collection of the Rev. T. A. Marshall there is a specimen of a *Phænoglyphis*, unfortunately not in very good condition; it is a ♂, and agrees very closely with the description of *Xanthochroa*, except in so far that it has the

apical third or so of the abdomen fuscous, while, according to Foerster and Thomson, the entire body is reddish-testaceous. The identity of the British specimen is thus a little doubtful; but as neither Thomson nor Foerster describes the ♂ of their species, it would be somewhat hazardous to consider ours as distinct. All the other species described by Thomson have the bodies black.

PSIACHRA, Foerster, *l. c.*, p. 356.

Psichacra Dalei, sp. n.

Antennæ a little longer than the body, red, the four apical joints fuscous, the 1st nearly double the length of the 2nd, thickened and semi-truncated at the apex, the 2nd globular, the 3rd a little longer than the 4th, thin, slightly thickened and truncated, and of a fuscous colour at the apex; the three following joints a very little shorter and of the same form and colour; the next three are a little shorter, thicker, and rounded at the apex; the last four are thicker than the preceding, the last being thicker and longer than the 12th; but there is scarcely a well-marked club. Head smooth, shining. Thorax smooth, shining, covered with a scattered pile; dull red, the mesonotum obscured with black in the middle; the pleuræ and sternum for the greater part black. Cup of scutellum raised, with a projecting rim, the posterior end projecting over the top like a ridge; at the base of the scutellum are two deep depressions.

Abdomen shorter than the thorax, compressed, acute, thin, black; the belly testaceous. On the second segment is a long hair fringe. Legs red. Wings hyaline, nervures pale testaceous.

Length $1\frac{1}{4}$ lines; alar. exp. $3\frac{1}{4}$ lines.

I am not quite sure as to the generic position of this insect of which I have only seen the female, but as a whole it comes very near to *Psichacra*, as defined by Foerster, and more particularly in the antennæ not ending in a distinct club, and in the form of the scutellum. The type of *Psichacra* is *longicornis*, Htg., of which I have only seen the ♂. Foerster (*l. c.*, p. 356), makes mention of the female, but gives no particular account of the antennæ in that sex beyond that there is no distinct club. Thomson (Oef. 1861, 404, 12), quotes *Eucoela gracilis*, Dbm., as probably the female of *longicornis*, Htg. He

describes the antennal club in the female as "haud discreta," which agrees tolerably well with Foerster's description. *Gracilis* agrees very closely with *Dalei* in coloration, it having the "scutello, foveo lanceolata metathorace, pedibusque rufo-testaceis."

Gracilis is in the collection of the Rev. T. A. Marshall, and is, I believe, correctly named by that gentleman, although the scutellum is black in his specimen. The antennæ are, however, very different from those of *Dalei*, the 3rd and following joints being short, thicker and more globular; the antennæ, too, being shorter than the body, which is much larger, stouter, and not so much compressed as in the other. The alar neuration is the same in the two species.*

Whether *longicornis* be the ♂ of *gracilis* or not is a point which I cannot at present determine from the limited material at hand, but I am inclined to believe that the two are quite distinct.

P. Dalei was taken by Mr. J. C. Dale at Glanville's Wooton, Dorsetshire.

Obs.—Many of Foerster's genera in this group of *Cynipidæ* are not easily made out, especially with the males (with one or two exceptions, when the males are easier identified than the females), and many of the characters he relies upon for the formation of his genera—especially those drawn from the form of the antennæ—appear to me to be merely sexual, and not of generic value. The antennæ in the males are very similar in the *Eucoelides*, while there is great variation with these organs in the females.

HEXACOLA, Foerster, *l. c.*, p. 347.

I have taken a specimen of *Hexacola hexatoma*, Htg., at Bonar Bridge, Sutherlandshire, and another in a moist meadow along the banks of the Allander, near Glasgow. From this it would appear to be a widely-distributed species.

* Mr. Marshall, in his list of *Cynipidæ* in the Ent. Ann. for 1874, refers *gracilis* to the genus *Cothonaspis*, which, however, is not the case, that genus, *inter alia*, not having a hair fringe. Mr. Marshall probably had mentally confounded *gracilis*, Dbm., with *gracilis*, Htg., which is a true *Cothonaspis*.

I presume that Thomson's *Kleditoma hexatoma** is the same as Hartig's species of the same name, although Thomson does not make any mention of it; at least there does not appear to be any great difference between the descriptions of the two authors.

Giraud † describes another species with a 6-jointed club, which is probably the same, the only difference being that it has more red colour on the legs.

CHARIPS MICROCERA.

Under the above name, there is in the collection of the Rev. T. A. Marshall (who has very kindly lent me all his parasitic *Cynipidæ* for examination) a little species which had belonged to the late A. H. Haliday, by whom it had been named; but seemingly has never been described by anyone.

The specimen is old and not in very good condition, so that it would not be very easy to draw up a proper description from this solitary specimen. Fortunately, however, I this summer succeeded in capturing eight specimens in the south of Scotland, thus giving ample material for determining its systematic position. My specimens were taken on the banks of the Ken above Dalry, at Colvend on the Kirkeudbright coast, and one example near Dumfries. Curiously enough all I have taken are males, that being likewise the case with Haliday's specimen.

In Foerster's generic arrangement it comes into his family "*Figitoidæ*," and in the table given (*l. c.*) at pp. 363, 364, would belong to ‡ d. d. k, and comes therefore nearest to *Sarothrus*, from which it differs in the perfectly smooth, shining, unfurrowed thorax. *Dicæra*, the next genus to *Sarothrus*, may be known by the absence of a hair fringe on the second abdominal segment, *Charips* having one, while, on the other hand, *Dicæra* has two holes at the base of the scutellum.

Antennæ as long as the body, 14-jointed, the 3rd joint curved, longer than the 4th. Eyes bare; mesonotum and scutellum smooth, shining, glabrous; the former without any furrows, the latter without any depressions at the base; somewhat oval in shape, and, compared to the

* Oef. 1861, 388, 5.

† Verh. z. b. Ges. Wien. 1860, 143, 25.

size of the thorax, comparatively large. Abdomen with a slight hair fringe on the base of the second segment. Wings with the radial cellule small, a very little longer than broad; the margin of the wings with a long hair fringe. In the general form of the antennæ (except, perhaps, that the joints are broader and more rounded), head and scutellum, and in the neuration of the wings, *Charips* agrees with *Sarothrus*.

Black, smooth, shining, antennæ pale testaceous, the basal joint black, the apical joints sometimes pale fuscous. Legs pale testaceous, the coxæ, the femora and tibiæ in the middle obscure fuscous, the abdominal hair fringe dark fuscous. The alar nervures pale testaceous.

Length a little over a $\frac{1}{4}$ of a line; alar. exp. 1 line.

CHALCIDIDÆ.

MEGASTIGMUS PICTUS.

Torymus pictus, Foerster, Beitr. z. Mon. d. Pter.
p. 31.

Megastigmus strobilobius, Ratz., Ichn. d. Forstins. ii.
p. 182.

Megas. pictus, Mayr, Verh. z. b. Ges. Wien. xxiv.
138.

This rare species is British. I have examined two specimens—one taken by the Rev. T. A. Marshall, in England, and another captured near Dumfries by myself. According to Ratzburg, it lives in pine cones, probably as a parasite of *Tortrix strobilana*. It appears to be rather an uncommon insect, for Mayr had only seen three specimens.

The other British species of this genus known to me are—*M. stigmaticans*, Fab. = *giganteus*, Walk., which is a parasite of *Cynips Kollari*.

M. dorsalis, Fab. = *Bohemanni*, Ratz. = *xanthopygus*, Foer., a common and very variable species, in many oak galls.

M. aculeatus, Svederus (*sec.* Thoms.) = *collaris*, Boh. = *transversus*, Walk. = *punctum*, Foer. = *vexillum*, Ratz. This is a parasite of *Trypeta continua*, Meig., a dweller in the berries of the rose.

Torymus azureus.

Torymus azureus, Boheman, Vet. ac. Handl. 1833, 369; Mayr, *l. c.* p. 100, 11; Thomson, Hymen. Scand. iv. 84, 5.

Torymus chalybæus, Ratz., *l. c.* i. 179.

For specimens of this unrecorded British species I am indebted to Dr. Buchanan White, who bred them from the larvæ of *Eupithecia togata*, found in pine cones near Perth.